Water 101
Water Filtration Systems for the Home – Part II

Continued from Front

Membrane Filtration Systems

These systems use advanced methods to remove minerals and other compounds from drinking water.The most common is referred to as reverse osmosis. Water passes over a special membrane, typically made of plastic.Through a process called osmosis,the water moves from one side of the membrane to the other, leaving most of the minerals behind,and creating water that is very low in dissolved minerals.The remaining water, which has a much higher concentration of minerals, is typically released into the sewer system. In other words, for every gallon of treated water, some amount of water will go down the drain. For this reason, it is important to select a membrane filter that has a very high treatment efficiency. Reverse osmosis systems can use anywhere from 3 to 9 gallons of water for every gallon of filtered water produced.

If you have a question you'd like to have answered as part of our Water 101 series, or if you have a suggestion for a topic, call us at ***791-4331*** *or email to* **TW_Web1@ci.tucson.az.us**.

Your WATER Connection
News & Tips for Tucson Water Customers

Water 101
Water Filtration Systems for the Home – Part II

Several customers have asked us to provide some information about home water filtration systems.

This new Water 101 series began last month with a look at carbon filter systems.This month we look at membrane filtration.

The home water filtration system you choose depends on what you want to change about your tap water.The three most common home treatment technologies include carbon filtration,membrane filtration,and water softening.

Continued on Back

On the Water Front

I'm very pleased to be able to tell you that Tucson Water's System Equity Fee has been approved. For the first time ever in Tucson, new growth will directly pay a system-wide fee, over and above the cost of purchasing the water meter and installing the new service line, every time a new home is added to our water system. The approval of the fee last month by Tucson's Mayor and Council means that those who build a new home will be sharing the cost of the excess capacity that is built into our water system. **The cost will be equitably shared by existing and future customers. That means fewer and lower water rate increases in the future.**

I want to make it clear to you that the fee, $1,416 per residential water connection, applies only to newly constructed homes and businesses connecting to our system, not existing homes that are resold. Existing homes are already part of the water system and are not creating new water demand.

The System Equity Fee is an important step toward growth contributing to costs it directly creates in Tucson. Tucson Water's customers have paid, through their water rates, for the extra water system capacity needed to supply future construction of homes and businesses. Now, new construction must "buy in" to the water system by paying for the extra system capacity it will be using.

Right now, the City of Tucson's Comprehensive Planning Task Force is working to determine other areas in which growth might contribute to costs it creates in our community – for transportation, emergency services and more. The study should result in recommendations in the near future.

With this fee in place, Tucson Water is poised to continue the projects and planning needed to ensure a quality supply of water and the long-term sustainability of our community.

David V. Modeer
Director, Tucson Water

Clearwater Quality Report - May 2003

50*	Sodium (ppm)
287.6	Mineral Content (ppm)
115*	Hardness (ppm)
8.0	pH (units)
Neg*	Coliform Bacteria
0.96	Chlorine level average (ppm)
80.6	Temp (deg F)

** Values for April 2003*

Visit the Tucson Water Web Site at http://www.cityoftucson.org/water

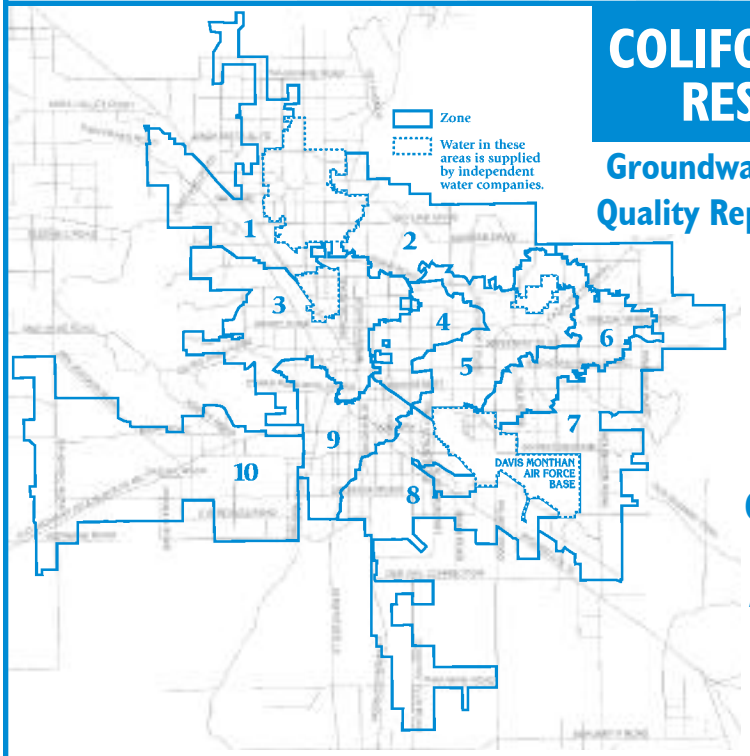
Your Water Connection **is produced by Tucson Water. To receive a copy, or to receive this information in Spanish, call 791-4331 or mail your request to: Customer Information, P.O. Box 27210, Tucson, AZ 85726-7210.**

City of Tucson TTY number: 791-2639

Si usted desea este documento escrito en español, por favor, llame al 791-4331.

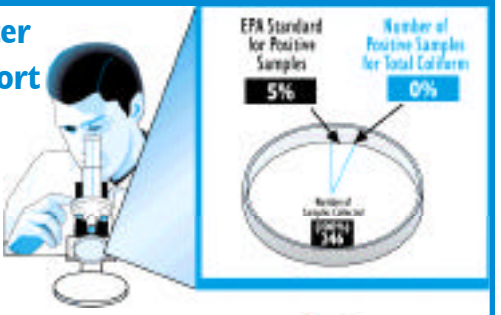
GROUNDWATER QUALITY REPORT - March 2003

	Water Quality Zone	1	2	3	4	5	6	7	8	9	10	System Wide
Sodium (ppm)	Average	51	44	47	36	34	37	30	41	46	39	40
	Range	*33-75*	*40-46*	*31-60*	*27-50*	*27-44*	*23-44*	*25-42*	*36-46*	*36-53*	*36-44*	*23-75*
Mineral Content (ppm)	Average	366	302	328	231	231	242	220	353	288	219	273
	Range	*185-536*	*274-323*	*182-453*	*180-378*	*173-333*	*204-290*	*173-267*	*267-440*	*205-406*	*199-245*	*173-536*
Hardness (ppm)	Average	129	134	139	103	96	105	109	195	133	82	124
	Range	*64-193*	*109-145*	*98-206*	*69-182*	*77-123*	*80-122*	*90-122*	*140-269*	*77-206*	*76-94*	*64-269*
pH (units)	Average	7.7	8.0	7.7	7.8	7.8	7.9	7.8	7.6	7.6	7.9	7.8
	Range	*7.3-8.2*	*7.8-8.2*	*7.4-8.2*	*7.5-8.2*	*7.3-8.1*	*7.3-8.2*	*7.3-8.0*	*7.1-8.2*	*7.2-8.2*	*7.3-8.1*	*7.1-8.2*
Temperature (deg F)	Average	73	72	71	77	74	73	72	74	77	73	73
	Range	*69-78*	*65-77*	*65-77*	*69-83*	*65-81*	*67-78*	*64-78*	*67-79*	*71-83*	*65-85*	*64-85*

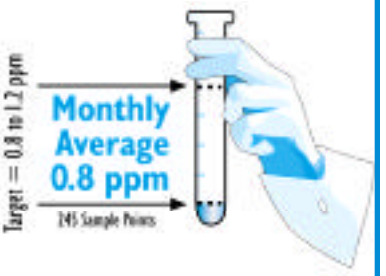


COLIFORM BACTERIA TESTING RESULTS - March 2003

Groundwater Quality Report



Chlorine Level Average



"PPM" means one part per million; 1 ppm = 1 teaspoon in 1,302 gallons

To give you a more accurate measurement of the water quality in your neighborhood, the Tucson Water service area has been divided into 10 zones based on differences in water pressure and water quality. For a detailed description of the zone boundaries, call 791-4331.

Conservation Corner:

Pete the Beak is Cookin' Up Conservation

"Summer is the right time for serving up water savings," says Master Chef Pete the Beak, owner of Café Conservation.Chef Pete is always looking for new recipes for using water more efficiently, and is ready and willing to share his conservation cuisine with all Tucsonans.Here are some of the items from the latest Conservation Café menu.

Xeriscape Salad

Take any amount of high water use plants and replace them with desert adapted plants that can survive in our hot, dry environment without huge amounts of water added.Add a drip irrigation system with multiple valves so that each type of plant receives only the amount of water it needs.The system delivers water in the root zone, right where the plants can use it.Install an irrigation timer that you can adjust each season to make sure you're not over-watering. Creatively sculpt your landscape to direct rainwater to plants, rather than to the driveway or sidewalk. Invite guests over to enjoy your beautiful yard.

Lose Your Leaks Lasagna

Take a dripping faucet and add 1 adjustable wrench,1 screwdriver, 2 rubber gaskets, and 2 ounces of elbow grease. By fixing that leak, you can save up to 50 gallons of water a day. Sit back and enjoy the sounds of silence as you contemplate your success and anticipate lower water bills as a result.

Flapper Flambé

Place 2-3 drops of food coloring in the tank of your toilet. Find a creative way to spend your time for 20-30 minutes. Return to the toilet and look at the water in the bowl. If it has any color, you've got a water-wasting toilet! In most cases, the problem is with the flapper, and replacing that leaking part can save you up to 100 gallons of water a day!

Dine at Water Smart Restaurants

Pete's Café Conservation only serves drinking water on request.Every glass served means a glass that must be washed, even if the customer doesn't drink the water! So,serving water only on request makes good sense.Ask your favorite restaurant if they participate in the "Water by Request" program.Tucson Water, in partnership with the Southern Arizona Restaurant and Hospitality Association, provides these restaurants with table signs that explain this water saving program and why customers must ask if they want water.

For more water saving recipes,please call Tucson Water's Public Information Office at 791-4331 or look for information on our web site (**www.cityoftucson.org/water**).